

Attorney Docket No.: J3680(C)  
Serial No.: 10/520,907  
Filed: July 15, 2005  
Confirmation No.: 9472

### **REMARKS**

By this amendment, Applicants have amended claim 1 to highlight that the compositions in which the molecules of the invention are used are classic shampoo compositions comprising primary anionic surfactant, optional amphoteric and/or zwitterionic cosurfactant and cationic conditioning polymer. This is to more clearly differentiate from cited references which either disclose the compound (albeit among thousands and thousands of possible components) as part of a "blending ratio" in the formulation of a masking composition (JP 2003/137758 reference); or which disclose leave-on compositions in which dialcohols are broadly, broadly disclosed (e.g., EP 371801 to Birtwistle or WO 00/00164 to Michael et al.) without any specificity to the alkyl groups or of the benefit of specific molecules in rinse-off shampoo compositions.

Support for "shampoo" may be found, for example, at page 5, line 14. Support for 5 to 30% anionic cleansing surfactant may be found at page 7, line 5. Support for 0 to 8% cosurfactant is found at page 7, lines 10-15. Support for 0.01-5% cationic polymer may be found at page 12, lines 20-23. Accordingly, no new matter is added by these changes.

Applicants also note that the Examiner suggests that claim 4 should be withdrawn because it does not read on the selected species. Applicants believe the Examiner is mistaken in this regard and that claim 4 need not be withdrawn. Specifically, assuming the species is 3,3-dimethyl-1,2 butanediol, applicants note that this is a molecule comprising 6 carbons in total. Thus, in the words of claim 4, the molecule comprises "at

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least two hydroxyl group" (it is a diol), wherein each OH is positioned with 3 (0.5n or half of the total 6 carbons) or fewer carbons directly between it and all other OH groups. As noted, claim 4 should thus be included.

Applicants note that claim 8 has been incorporated into amended claim 1 (i.e., claim 1 now requires surfactant) and this has been cancelled, without prejudice.

In view of the comments above, (together with arguments and amendments in support of patentability noted below) applicants believe claims 1-7, 9 and 10, as amended, should be allowed.

At page 3 of the Office Action, the Examiner has rejected claims under 35 USC §102(e) as allegedly anticipated by JP 2003/137758 to Kawasaki (hereinafter, "Kawaski"). The Examiner states that various specific hexanols or heptanols are disclosed for use in hair dyes and/or personal wave agent compositions. This rejection is respectfully traversed for reasons set forth below.

As far as applicants can tell, the Kawaski reference relates to components which can be blended together to act as deodorizing or masking materials in perfumes which can be used in hair cosmetics.

Literally, hundreds or thousands of such potential blending ingredients appear to be disclosed with no particular emphasis on one versus another. Thus, to the extent compounds even similar to those of the invention are mentioned, there is no reason whatsoever a person of ordinary skill in the art would know to isolate such specific

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component (separate from a blend), or that it would have any benefit (e.g., as hair treatment agent) in a shampoo composition. In other words, there is no 35 USC §102 argument at all in view of amended claims and absolutely no prima facie showing of obviousness. It is respectfully requested this rejection be withdrawn.

At page 4 of the Office Action, the Examiner rejects claims over WO 2003/063810 to Ahluwalia). This reference is said to disclose hair reduction by topical application of inhibitors of fatty acid metabolism.

First, it is not clear what CN reference (hexanoic acid compound) the Examiner is referring to at the bottom of page 4 of the Office Action. In any event, whatever this refers to, this again would clearly not fall within wash-off shampoo composition claims as amended. Further, as with the Kawasaki reference, there is absolutely no reasoning or direction to one of ordinary skill why they would use such type of compound in the shampoo compositions of the invention. Again, there is simply no *prima facie* case of obviousness at all.

At page 5 of the Office Action, the Examiner rejects the claims under 35 USC §102(b) as allegedly anticipated by EP 371801 to Birtwistle (hereinafter, "Birtwistle"). This reference is said to teach compositions comprising dialkyl or alkenyl phosphates and alcohol derivatives for skin and hair care. The rejection is respectfully traversed for reasons set forth below.

In the first place, the diol compounds of Birtwistle are preferably straight chain compounds (page 4, line 21) and thus fail to recognize the benefit of the branched

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compounds of the subject invention. In Example 1, applicants have clearly demonstrated that branched compounds 1 and 2 are better than unbranched compound (pages 28-30).

Further, the composition of Birtwistle are clarify "leave-on" compositions designed to remain on hair (page 4, lines 1-4) compared to the wash-off shampoo composition of the subject invention.

Finally, the Birtwistle composition are clearly intended to comprise diol compounds in 70-97% polar solvent (applied as a leave-on) and, again, are not comparable to the cleansing shampoo compositions of the invention.

In view of the amendments and discussion above, it is respectfully requested that the rejection over Birtwistle be withdrawn.

At page 5 of the Office Action, the Examiner has rejected claims under 35 USC §103(a) over WO 00/00164 to Michael et al. (hereinafter, "Michael"). The Examiner states that Michael discloses leave-on hair compositions containing a diol. The Examiner notes that butyl diol, but not ternary butyl is disclosed.

First, applicants again note the diols are broadly disclosed and there is no motivation to select one over any other or, for that matter, alcohols over others.

Also, there is no reason to know that specific diols of the invention would have beneficial effect in rinse-off shampoo compositions of the invention.

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Finally, as noted above, applicants have specifically demonstrated that specific branched diols of the invention are superior to unbranched compounds (see pages 28-30 of the specification).

Thus, there is no prima facie showing in the first place and, in any event, applicants have examples rebutting any such *prima facie* argument.

In view of the amendments and discussion above, it is respectfully requested the Examiner withdraw all rejections of the claims and that claims as amended, i.e. claims 1-7, 9 and 10, as amended, be allowed.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,



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